DATE REPORT 5-12-93

DISPOSITION low ESI

SAM SIGNATURE Janice P Thomas

SITE INVESTIGATION

SOUTHERN STATES LANDFILL
FULTON COUNTY
GEORGIA

MARCH 29, 1993

Conducted by:

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EDWIN L. WILLIAMS

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Bruce Khaleghi

HAZARDOUS WASTE MANAGEMENT BRANCH
GEORGIA ENVIRONMENTAL PROTECTION DIVISION
GEORGIA DEPARTMENT OF NATURAL RESOURCES

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SITE INVESTIGATION

Southern States (Sanifill) Landfill
GAD984288191
Fulton County, Georgia

1.0 INTRODUCTION

Under the authority of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Environmental Protection Division (EPD), Hazardous Waste Management Branch conducted a Site Investigation (SI) at the Southern States (Sanifill) Landfill in Fulton County, Georgia. The purpose of the investigation was to assess the threat to human health or the environment posed by this site and to determine the need for further investigation under CERCLA or other authority, and , if appropriate, to support site evaluation using the Hazard Ranking System (HRS) for proposal to the National Priorities List (NPL). The investigation included an on-site inspection, sample collection, and a review of previous sampling of environmental media to test hypotheses generated during the Preliminary Assessment (PA) (Ref. 1).

2.0 SITE DESCRIPTION

2.1 LOCATION

The Southern States Landfill is located immediately adjacent to the Chattahoochee River, at the western edge of the City of Atlanta and Fulton County boundary (Ref. 2). The geographic coordinates of the site are 34 degrees 49'30" N. latitude and 84 degrees 27'57" W longitude (Ref. 3). The site is bounded on the north by the Chattahoochee River, on the west by Blue Circle Cement plant, on the southeast by Chambers Landfill, and on the east by a number of industrial facilities, including a pair of CSX rail lines, a sewage treatment plant, and a water treatment plant.

The climate of Fulton County is warm and humid. Summer temperatures average 79 degrees Fahrenheit; winter temperatures average 49 degrees Fahrenheit. Average annual rainfall in the Atlanta area is approximately 49 inches, with the highest precipitation occurring in March (Ref. 4,5)

2.2 PHYSICAL DESCRIPTION AND OPERATIONAL HISTORY

The area around the Southern States Landfill is heavily industrial. Access to the site is via Bolton Road to Collins Street. Bolton Road carries mainly commercial and industrial traffic in the site vicinity. The site is roughly triangular in shape and occupies an approximately 39-acre area on the southeastern bank of the Chattahoochee River north of Bolton Road. The northern part of the site is located in the 100-year floodplain (Ref. 6), and the remainder of the site extends across a topographic high south of the river.

Original topographic elevations at the site ranged from a low of 750 feet at the river to a high of approximately 820 feet. It is not clear to what extend subsequent grading and filling of the site has altered these elevations.

Prior to 1984, the site was the location of a clay mining operation. No other pre-landfill uses for this site are known. Although the site was permitted by EPD in 1975 for use as a sanitary landfill (Permit Number 060-010D), landfilling operations did not begin until October, 1984, subsequent to its purchase by R.M. Cash and Sons.

The Southern States Landfill accepted both putrescible and non-putrescible commercial and residential solid wastes. Wastes were deposited in a sequential manner, beginning at the northeast corner of the property near the railroad. A construction and demolition waste section was subsequently added near the river in the northwestern corner of the site. Regulated hazardous wastes were not accepted at the landfill. Amounts of hazardous substances found at the landfill should, therefore, not exceed amounts typical of municipal sanitary landfills.

The site was owned and operated as Southern States Landfill from its opening in 1984 until mid-1990, when it was purchased by Sanifill, the present owner and operator.

3.0 WASTE/SOURCE SAMPLING

A reconnaissance visit to the Southern States Landfill was made on March 5, 1993. At that time, leachate was observed at several locations along the southeast face of the landfill. A return visit was made on March 19, 1993 to collect samples of soil and leachate. A total of six samples were collected, two surface water samples and four soil/leachate samples. The two surface water sample locations were chosen to reflect water quality upgradient from the landfill (the southeast side) and downgradient (the north side). Two of the soil/leachate samples were collected on the southeast slope of the landfill (one composite and one grab sample). The other two soil/leachate samples were collected on the north slope of the landfill (one composite and one grab sample). Sample analyses are presented in Appendix C.

4.0 GROUNDWATER PATHWAY

4.1 GEOLOGY AND HYDROGEOLOGY

Fulton County is located within the Piedmont Physiographic Province. The area is characterized by gently rolling topography with moderate slopes (20-40 %) and moderate relief (150 to 400 feet). Level or nearly level flood plains border the Chattahoochee River. Soils in the immediate site vicinity include those of the Congaree-Chewacla-Wickham association along the fringes of the river, and those of the Madison and Louisa further inland. The Congaree-Chewacla-Wickham soils occur as narrow, irregular strips in river bottoms and on terraces along the Chattahoochee River. Drainage is moderately good

to good. The natural fertility of these soils is moderate to high due to the organic matter content. Madison and Louisa soils are moderately well-drained to well-drained soils developed on mica schists with locally high quartz content. These soils are well drained to excessively drained. Natural fertility of the Louisa-Madison association soils is generally low due the low organic matter content and relatively high acidity. All of these soils are classified as fine sandy loam, and permeabilities in the area range from 7.1 X 10-4 to 3.8 X 10-6 cm/sec (Ref. 1).

The Southern States Landfill site lies completely within the Brevard Zone of the Georgia Piedmont Geologic Province. Rocks of the Brevard Zone have undergone ductile shearing as a result of faulting. Rock types present in the Brevard Fault Zone include protomylonite, mylonite, blastomylonite, button schist and phyllonite (Ref. 8).

As is typical of the Georgia Piedmont, the Southern States Landfill site is underlain by an unconfined aquifer composed of fractured crystalline bedrock and the overlying mantle of residuum derived from weathering of the bedrock. Groundwater in such aquifers is generally encountered between 10 and approximately 600 feet of depth (ADD REF. 9). The vicinity of the Site has not been identified as a "most significant groundwater recharge area" (Ref. 10.)

4.2 GROUNDWATER TARGETS

The Southern States Landfill was constructed with no artificial or other underlying liner to impede the flow of hazardous substances out of the landfill. In early 1991, groundwater monitoring detected the presence of chlorobenzene in groundwater from the downgradient wells. Volatile organic contaminants have been detected in groundwater from the upgradient wells. The source of contamination in the upgradient wells is unknown. Contamination may be migrating onto the site, or gasses from the landfill may be condensing inside the riser pipes in the upgradient wells, which are screened across the water table (Ref. 11).

The nearest groundwater well is located at Sonoco, an industrial facility located on the east side of the CSX rail lines. Sonoco, however, does not use ground water for domestic purposes. A survey of wells in the site vicinity indicates that only five domestic wells are located within the four-mile radius of the site. All of these wells are located more than one mile distant (Ref. 12).

The residents in the vicinity of Southern States Landfill obtain their drinking water from municipal supply derived from the Chattahoochee River. Surface water intakes for the municipal water system are located upstream from Southern States Inc, Landfill. This is not a blended system.

4.3 GROUNDWATER CONCLUSIONS

A release to ground water is indicated, based on the sampling data from monitoring wells

at the site. There is also a possibility that additional contamination is entering the site from another source. No primary targets have been identified due to the fact that the nearest domestic water well is located over one mile from the site. These wells have been identified as secondary groundwater targets. It is anticipated, however, that ground water leaving the site will enter the Chattahoochee River, thereby affecting surface water quality.

5.0 SURFACE WATER PATHWAY

5.1 HYDROLOGIC SETTING

Surface water runoff from Southern States Landfill is channelled by grading, piping, drainage swales and a sedimentation pond to the Chattahoochee River at the northern boundary of the site (Ref. 13). The Chattahoochee River flows in a southwesterly direction from the site until it reaches the Georgia-Alabama border, where it has been impounded to form West Point Reservoir. The Chattahoochee exits the south end of the lake at West Point Dam and travels southward to the Gulf of Mexico (Ref. 14).

At the time of the March 5, 1993 reconnaissance, leachate was observed at numerous locations along the face of the landfill, indicating that a release to surface water was likely. During the March 19, 1993 sampling event, leachate was observed flowing into the surface water pathway for eventual release to the Chattahoochee River. Results of sample analyses indicated that Federal Primary Safe Drinking Water Standards were not exceeded. Amphibians (frog) were observed living in the outfall from the landfill underdrain. The impact on vegetation at the site could not be assessed because of seasonal dieoff.

The Chattahoochee River is classified only for fishing (no recreational, scenic, or drinking water) for the fifteen-mile distance downstream of the site (Ref. 15). As the site is located on the banks of the Chattahoochee River, all site elevations below 772 feet are within the 100-year flood plain (Ref. 6). The average flow of the river is 3,000 cfs with a typical minimum flow of approximately 1,000 cfs (Ref. 16).

5.2 SURFACE WATER TARGETS

The Chattahoochee River is joined by other tributaries within the fifteen-mile surface water pathway (Ref. 2). There are no municipal surface water intakes along the fifteen-mile downstream surface water pathway (Ref. 14). The ranges of endangered or threatened mammals, fish, or amphibians do not occur along this section of the river, nor are there any critical habitats for endangered or threatened species on the surface water pathway (Ref. 17). The Chattahoochee River, however, is designated a sensitive environment under the Clean Water Act, because it has been classified for fishing.

5.3 SURFACE WATER CONCLUSIONS

A release to surface water from Southern States Landfill was suspected due to the well-defined surface water pathway and the presence of leachate at the site. Analytical results from sampling at the site on March 19, 1993 have determined that the leachate was not a hazardous waste. Documented groundwater contamination probably enters the river downgradient of the site, however.

6.0 SOIL AND AIR PATHWAYS

6.1 PHYSICAL CONDITIONS

Southern States Landfill covers wastes daily with a clean soil cover, as specified in their permit. Leachate escaping from the landfill was observed at numerous locations along both the northern and southeastern slopes of the landfill, indicating that the soil exposure pathway is of concern at the site. In addition, although the landfill has fencing at the entrance, it is not completely fenced. The Chattahoochee River on the north and the CSX rail lines on the east do not prevent access to the site. Analyses of leachate samples obtained during the March 19, 1993 sampling event indicated that the leachate was not a hazardous waste.

Air emissions from Southern States Landfill were reviewed under the issuance of an Air Quality Permit for a flare. The flare controls landfill gasses which have been vacuum extracted from the landfill using a series of extraction wells (Ref. 18).

6.2 SOIL AND AIR TARGETS

An average population per square mile (approximately 1,300) persons per square mile) indicates an estimated population of 65,300 people reside within the four-mile radius of the Southern States Landfill. The population located within the one-mile radius is estimated at approximately 4,000 people. The closest residences are located approximately one quarter mile from the facility. The facility is currently active, employing eight people. In addition, there are several industrial facilities located within 1,000 feet of the site whose worker populations represent potential targets (Ref. 13).

During the site reconnaissance of March 5, 1993, investigators easily gained access to the site, indicating that fencing is inadequate to prevent access. However, leachate escaping from the face of the landfill is not expected to pose a risk of exposure to anyone entering the site.

The ranges of two endangered birds, the Southern Bald Eagle (Haliaeetus leucocephalus leucocephalus) and the Red Cockaded Woodpecker (Picoides borealis) and one endangered terrestrial mammal, the Indiana Bat (Myotis sodalis) include Fulton County (Ref. 17). Fulton County is also a part of the range of one endangered plant [the

Piedmont Barren Strawberry (Veratrum woodii)], two threatened plants [Climbing Magnolia (Schisandra glabra) and False Hellebore (Walsteinia lobata)] and two species of unusual plants [the Pink Ladyslipper (Cypripedium acaule) and Yellow Ladyslipper (Cypripedium calceolus var. pubescens)]. However, there are no critical habitats for any of these species in the vicinity of the site.

6.3 SOIL EXPOSURE AND AIR PATHWAY CONCLUSIONS

The soil exposure pathway was of concern at Southern States Landfill for two reasons. First, leachate was observed escaping from the landfill at numerous locations along the southeast and north slopes of the landfill. Second, access to the site is uncontrolled. In addition to worker populations on and near the site, nearby residents may stray onto the landfill. Analyses indicate that the leachate is not a hazardous waste.

The air pathway is not of concern at the Southern States Landfill because landfill gasses are collected using a vacuum extraction system and the collected gasses are burned off with a flare.

7.0 CONCLUSIONS

The surface water pathway is of concern at Southern States Landfill, because a possible release to surface water was observed. The site is bordered on the north by the Chattahoochee River, and surface water drainage from the site is channelled to the river. Leachate was observed entering the surface water pathway for eventual discharge to the Chattahoochee. The Chattahoochee River is a designated fishery. The analyses of surface water samples from the site indicate that Federal Primary Drinking Water Standards were not exceeded.

A release to groundwater is documented at the Southern States Landfill, based on the analytical results from groundwater monitoring at the site. No primary targets have been identified, however, because the nearest domestic well is located over one mile from the site. It is likely that groundwater leaving the site will enter the Chattahoochee River, thereby affecting surface water quality and potentially impacting fisheries.

The soil exposure pathway is also of concern at Southern States Landfill because of the presence of numerous leachate streams which contact the soil and because access to the site is uncontrolled. Analytical results from environmental sampling, however, indicate that the leachate is not a hazardous waste.

The air pathway is not of concern at Southern States Landfill because landfill gasses are collected using a vacuum extraction system and then are burned off with a flare.

REFERENCES

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12. Rob Allen, Unites States Geological Survey, Water Resources Division, Georgia District.

13. Site investigation of Southern States Landfill and surrounding area on September 1, 1992. State investigator, A.Y. Brooks. Southern States Landfill contacts: James Leiper and Gerald Stelly.

14. Water Availability and Use, 1984, Georgia Department of Natural Resources, Environmental Protection Division.

15. Rules and Regulations for Water Quality Control, Chapter 391-3-6 Revised, January 23, 1991.

16. Water Resources Data, Georgia Water Year, 1990, U.S. Geological Survey, Water Data Report GA-90-1.

17. Georgia's Protected Wildlife, Georgian Department of Natural Resources, Game and Fish

Division, September, 1977. Supplement, September, 1987.

18. Georgia Air Protection Branch's Correspondence and Permit files on Southern States Landfill. (See Reference 1 for file synopsis.)

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APPENDIX B

SITE PHOTOGRAPHS

U.S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10715677 Site ID: GAD984288191

Site Name: Southern States Landfill

Nature of Material:

Map:	☐	Computer Disks:	☐
Photos:	☒	CD-ROM:	☐
Blueprints:	☐	Oversized Report:	☐
Slides:	☐	Log Book:	☐

Other (describe): Site Photos

Amount of material:

* Please contact the appropriate Records Center to view the material *

APPENDIX C

SAMPLE ANALYSES/
CHAIN OF CUSTODY

DATE: 3/19/93 PROJECT: Southern State Landfill COLLECTOR: Khaleeli/AWilliams

NO. SAMPLES: 6 LOG NOS. 4676 - 4681 LIQUID ✓ SOLID ____ SOIL ✓

CAUSTIC ____ ACID ____ SOLVENT ____ UNKNOWN ____ SLUDGE ____

INFORMATION FOUND: ____

HAZARDOUS WASTE NOS. ____

HAZARDOUS HANDLING: ____

WORK PRIORITY (CRITICAL NEED) Critical (High priority)

APR 13 1993

METALS ANALYSES

	TOT	DIS			
METALS (DW NO Hg)	☐	☐	TCLP	METALS (DW NO Hg) ☑	LOWEST LOWER DETECTABLE LIMITS ☐ 100X ☐ 30X ☐
METALS (DW WITH Hg)	☐	☐	TCLP	METALS (DW WITH Hg) ☐	ORGANICS ☑

	TOT	DIS		TOT	DIS	T.C.L.P.			
NICKEL	☐	☐	CADMIUM	☐	☐	NICKEL	☐	CADMIUM	☐
ARSENIC	☐	☐	LEAD	☐	☐	ARSENIC	☐	LEAD	☐
CHROMIUM	☐	☐	MERCURY	☐	☐	CHROMIUM	☐	MERCURY	☐
CHROM-HEX	☐	☐	SELENIUM	☐	☐	CHROM-HEX	☐	SELENIUM	☐
____	☐	☐	____	☐	☐	____	☐	ORGANICS	☑

SPECIFIC ANALYSES

pH	☑	SULFIDE	☐	% SOLIDS	☐	____	☐
FLASH PT	☐	SP.COND.	☐	TOT. PHENOLS	☐	____	☐
CYANIDE TOT.	☐	TOC	☐	CHLORIDE	☐	____	☐
CYANIDE AM.	☐	TOX	☐	FLUORIDE	☐	____	☐

ORGANIC ANALYSES

PESTICIDE SCREEN (EC)	☐	GC-MS ACID EXTRACTABLES	☑
PCB	☐	GC-MS BASE/NEUTRALS	☑
VOLATILE ORGANICS (VOA)	☑		

SPECIFIC ORGANICS: ____

METALS

APPROVED: Bhen Khaleeli AUTHORIZED: ____

BH/00897

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
LABORATORY REPORT

SA
DA 3/19/93 PROJECT: Southern States Landfill (Fulton Co) COLLECTOR: Williams/Khaleesh

HW LOG NO.

DATE REC'D 3/19/93 LABEL
TIME REC'D 1535
REC'D BY: L. Medina
DEL BY: D. Williams
Harold Leopard
LABORATORY MANAGER
DATE: 4-9-93

PARAMETERS	LAB NO.	HW 4676 (ug/L)	HW 4677 (ug/L)	HW 4678 (mg/Kg)	HW 4679 (mg/Kg)	HW 4680 (mg/Kg)
	LABEL	4676	4677	4678	4679	4680
		Surface water #1 onto property	Surface water #2 off of property	Soil/ Sludge leachate location	Soil/ Sludge leachate location	Soil/ Sludge leachate location
		1	2	3	4	5
Total Metals:						
Ag		< 30	< 30	< 3	< 3	< 3
As		< 10	< 10	9.5	< 6	8.1
Ba		41	150	190	110	140
Cd		< 6	< 6	< 1	< 1	< 1
Cr		< 10	< 10	40	26	35
Pb		< 25	< 25	< 3	< 3	< 3
Se		< 5	< 5	< 20	< 21	< 21
pH		7.7	7.0	7.2	7.0	6.5
VOA GCMS BN/A		See "	Attached "	"	"	"

REMARKS:
TCLP not warranted based on Total values.

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

LABORATORY REPORT

SA
DA 3-19-93 PROJECT: Southern States Landfill (Fulton Co) COLLECTOR: Williams/Khaleghi

	HW LOG NO.			
DATE REC'D 3/19/93	LABEL	soil/sludge		
TIME REC'D 1535		leachate		
REC'D BY: J Medina		location		
DEL BY: D. Williams				
J Harold Langford LABORATORY MANAGER		4681		
DATE: 4-9-93		G		
PARAMETERS	LAB NO.	HW 4681 (mg/Kg)		
Total Metals:				
As		< 3		
Ag		< 6		
Ba		120 ✓		
Cd		< 1		
Cr		25 ✓		
Pb		< 3		
Se		< 21		
pH		6.4		
VOA GCMS BN/AC		See Attached		

REMARKS:

TCLP not warranted based on Total values.

DATE: April 05, 1993
PROJECT: **Southern States Landfill**
SOURCE: **Fulton Co.**
Soil/Sludge
Leachate location

GEORGIA ENVIRONMENTAL PROTECTION
SEMIVOLATILE ORGANIC ANALYSIS
DATA REPORTING SHEET
SAMPLE MATRIX: **Soil**
SAMPLE NO: **HW-4681**
Sediment
Concentration Units **ug/kg**

DATE SAMPLED : 3/9/93
DATE RECEIVED: 3/19/93
DATE EXTRACTED: 3/30/93
DATE ANALYZED: 3/31/93
CHEMIST: RS COMPLETED: SB/or

COMPOUND	Storet#	FOUND
1,2-Dichlorobenzene	34539	<660
1,3-Dichlorobenzene	34569	<660
1,4-Dichlorobenzene	34574	<660
Bis(2-Chloroethyl)Ether	34276	<660
Hexachloroethane	34399	<660
N-Nitrosodi-N-Propylamine	34428	<660
Nitrobenzene	34450	<660
Hexachlorobutadiene	38705	<660
1,2,4-Trichlorobenzene	34554	<660
Naphthalene	34445	<660
Bis(2-Chloroethoxy)Methane	34281	<660
Isophorone	34411	<660
Hexachlorocyclopentadiene	34389	<660
2-Chloronaphthalene	34584	<660
Acenaphthylene	34203	<660
Acenaphthene	34208	<660
Dimethyl Phthalate	34344	<660
2,4-Dinitrotoluene	34614	<660
2,6-Dinitrotoluene	34629	<660
4-Chlorophenyl Phenyl Ether	34644	<660
Fluorene	34384	<660
Diethyl Phthalate	34339	<660
N-Nitrosodimethylamine	34441	<660
N-Nitrosodiphenylamine	34436	<660
Hexachlorobenzene	39701	<660
4-Bromophenyl Phenyl Ether	34639	<660
Phenanthrene	34464	U <660
Anthracene	34223	<660
Di-N-Butyl Phthalate	39112	<660
2-Methyl Naphthalene	78868	<660
Dibenzofuran	75647	<660
Bis(2-Chloroisopropyl)Ether	34286	<660
2,4,5-Trichlorophenol	78401	<660

Compound	Storet#	FOUND
Fluoranthene	34379	U <660
Pyrene	34472	U <660
N-Butyl Benzyl Phthalate	34295	<660
Bis(2-Ethylhexyl)Phthalate	39102	<660
Chrysene	34323	<660
Benzo(a)Anthracene	34529	<660
Di-N-Octyl Phthalate	34599	<660
Benzo-(B)Fluoranthene	34233	<660
Benzo-(K)Fluoranthene	34245	<660
Benzo-A-Pyrene	34250	<660
Indeno(1,2,3-CD)Pyrene	34406	<660
1,2,5,6-Dibenzanthracene	34559	<660
Benzo(GHI)Perylene	34524	<660
2-Chlorophenol	34589	<660
2-Nitrophenol	34594	<660
Phenol (GC/MS)	34695	<660
2,4-Dimethylphenol	34609	<660
2,4-Dichlorophenol	34604	<660
2,4,6-Trichlorophenol	34624	<660
4-Chloro-3-methylphenol	34455	<1300
2,4-Dinitrophenol	34619	<3300
4,6-Dinitro-2-methylphenol	34660	<3300
Pentachlorophenol	39061	<3300
4-Nitrophenol	34649	<3300
Benzidine	39121	<3300
3,3'-Dichlorobenzidine	34634	<1300
2-Methylphenol		<660
4-Methylphenol		U <660
Sulfur		**35000 NJ**
Fatty Acids		**710000 NJ**

U - Present less than calculation limit.
J - Estimated Value (TIC 1:1 response)
N - Tentatively identified compound (TIC)- Identification is based on a mass spectral library search.

DATE: April 08, 1993
PROJECT: **Southern States Landfill**
SOURCE: **Fulton Co.**
Soil/Sludge
Leachate location

GEORGIA ENVIRONMENTAL PROTECTION
VOLATILE ORGANIC ANALYSIS
DATA REPORTING SHEET
SEDIMENT
SAMPLE MATRIX: **Soil**
SAMPLE NO: **HW-4681**

DATE SAMPLED : 3/19/93
DATE RECEIVED: 3/19/93
DATE ANALYZED: 3/31/93

CHEMIST: MKB COMPLETED: SB/DR

Concentration Units **ug/kg**

COMPOUND	Storet#	FOUND	Compound	Storet#	FOUND
Methylene Chloride	34426	10 .	Acetone	75059	310 .
Trichlorofluoromethane	34491	<5	Methyl Ethyl Ketone	75078	550 .
1,1-Dichloroethylene	34504	<5	Carbon Disulfide	78544	<5
1,1-Dichloroethane	34499	U <5	Vinyl Chloride	34495	<10
1,2-Trans-Dichloroethylene	34549	<5	2-Hexanone	75166	<50
Chloroform	34318	<5	Methyl Isobutyl Ketone	75169	<50
1,2-Dichloroethane	34534	<5	Styrene	75192	5.0 .
1,1,1-Trichloroethane	34509	U <5	Xylene (Total)	45510	U <5
Carbon Tetrachloride	34299	<5	Chloroethane	34314	<10
Dichlorobromomethane	34330	<5	1,2-Dibromoethane	79749	<5
1,2-Dichloropropane	34544	<5	Vinyl Acetate		<50
Trans-1,3-Dichloropropene	34697	<5	Choromethane	34421	<10
Trichloroethylene	34487	<5	Bromomethane	34416	<10
Benzene	34237	<5			
Chlorodibromomethane	34309	<5			
1,1,2-Trichloroethane	34514	<5			
Cis-1,3-Dichloropropene	34702	<5			
Bromoform	34290	<5			
1,1,2,2-Tetrachloroethane	34519	<5			
Tetrachloroethylene	34478	<5			
Toluene	34483	7.9 .			
Chlorobenzene	34304	<5			
Ethylbenzene	34374	U <5			

U - PRESENT LESS THAN CALCULATION LIMIT
J - ESTIMATED VALUE (TIC 1:1 RESPONSE)
M - NOT ANALYZED
N - TENTATIVELY IDENTIFIED COMPOUND - IDENTIFICATION IS BASED ON A MASS SPECTRAL LIBRARY SEARCH

DATE: April 05, 1993
PROJECT: **Southern States Landfill**
SOURCE: **Fulton Co.**
Soil/Sludge
Leachate location

GEORGIA ENVIRONMENTAL PROTECTION
SEMIVOLATILE ORGANIC ANALYSIS
DATA REPORTING SHEET
SAMPLE MATRIX: **Soil**
SAMPLE NO: **HW-4680**
Sediment
Concentration Units **ug/kg**

DATE SAMPLED : 3/ 2/93
DATE RECEIVED: 3/29/93
DATE EXTRACTED: 3/30/93
DATE ANALYZED: 3/31/93
CHEMIST: RS COMPLETED: SB/BR

COMPOUND	Storet#	FOUND
1,2-Dichlorobenzene	34539	<660
1,3-Dichlorobenzene	34569	<660
1,4-Dichlorobenzene	34574	<660
Bis(2-Chloroethyl)Ether	34276	<660
Hexachloroethane	34399	<660
N-Nitrosodi-N-Propylamine	34428	<660
Nitrobenzene	34450	<660
Hexachlorobutadiene	38705	<660
1,2,4-Trichlorobenzene	34554	<660
Naphthalene	34445	<660
Bis(2-Chloroethoxy)Methane	34281	<660
Isophorone	34411	<660
Hexachlorocyclopentadiene	34389	<660
2-Chloronaphthalene	34584	<660
Acenaphthylene	34203	<660
Acenaphthene	34208	<660
Dimethyl Phthalate	34344	<660
2,4-Dinitrotoluene	34614	<660
2,6-Dinitrotoluene	34629	<660
4-Chlorophenyl Phenyl Ether	34644	<660
Fluorene	34384	<660
Diethyl Phthalate	34339	<660
N-Nitrosodimethylamine	34441	<660
N-Nitrosodiphenylamine	34436	<660
Hexachlorobenzene	39701	<660
4-Bromophenyl Phenyl Ether	34639	<660
Phenanthrene	34464	U <660
Anthracene	34223	U <660
Di-N-Butyl Phthalate	39112	<660
2-Methyl Naphthalene	78868	<660
Dibenzofuran	75647	<660
Bis(2-Chloroisopropyl)Ether	34286	<660
2,4,5-Trichlorophenol	78401	<660

Compound	Storet#	FOUND
Fluoranthene	34379	1000 .
Pyrene	34472	U <660
N-Butyl Benzyl Phthalate	34295	<660
Bis(2-Ethylhexyl)Phthalate	39102	<660
Chrysene	34323	U <660
Benzo(a)Anthracene	34529	U <660
Di-N-Octyl Phthalate	34599	<660
Benzo-(B)Fluoranthene	34233	<660
Benzo-(K)Fluoranthene	34245	<660
Benzo-A-Pyrene	34250	<660
Indeno(1,2,3-CD)Pyrene	34406	<660
1,2,5,6-Dibenzanthracene	34559	<660
Benzo(GHI)Perylene	34524	<660
2-Chlorophenol	34589	<660
2-Nitrophenol	34594	<660
Phenol (GC/MS)	34695	<660
2,4-Dimethylphenol	34609	<660
2,4-Dichlorophenol	34604	<660
2,4,6-Trichlorophenol	34624	<660
4-Chloro-3-methylphenol	34455	<1300
2,4-Dinitrophenol	34619	<3300
4,6-Dinitro-2-methylphenol	34660	<3300
Pentachlorophenol	39061	<3300
4-Nitrophenol	34649	<3300
Benzidine	39121	<3300
3,3'-Dichlorobenzidine	34634	<1300
2-Methylphenol		<660
4-Methylphenol		940 .
Sulfur		**8300 NJ**
Fatty Acids		**13000 NJ**
Benzoic Acid		**1100 .**

U - Present less than calculation limit.
J - Estimated Value (TIC 1:1 response)
N - Tentatively identified compound (TIC)- Identification is based on a mass spectral library search.

DATE: April 08, 1993
PROJECT: **Southern States Landfill**
SOURCE: **Fulton Co.**
Soil/Sludge
Leachate location

GEORGIA ENVIRONMENTAL PROTECTION
VOLATILE ORGANIC ANALYSIS
DATA REPORTING SHEET
SEDIMENT
SAMPLE MATRIX: **Soil**
SAMPLE NO: **HW-4680**

DATE SAMPLED : 3/19/93
DATE RECEIVED: 3/19/93
DATE ANALYZED: 3/31/93

CHEMIST: MKB COMPLETED: SB/em

Concentration Units **ug/kg**

COMPOUND	Storet#	FOUND	Compound	Storet#	FOUND
Methylene Chloride	34426	35 .	Acetone	75059	1500 .
Trichlorofluoromethane	34491	<5	Methyl Ethyl Ketone	75078	5100 .
1,1-Dichloroethylene	34504	<5	Carbon Disulfide	78544	<5
1,1-Dichloroethane	34499	<5	Vinyl Chloride	34495	<10
1,2-Trans-Dichloroethylene	34549	<5	2-Hexanone	75166	<50
Chloroform	34318	<5	Methyl Isobutyl Ketone	75169	U <50
1,2-Dichloroethane	34534	<5	Styrene	75192	U <5
1,1,1-Trichloroethane	34509	<5	Xylene (Total)	45510	U <5
Carbon Tetrachloride	34299	<5	Chloroethane	34314	<10
Dichlorobromomethane	34330	<5	1,2-Dibromoethane	79749	<5
1,2-Dichloropropane	34544	<5	Vinyl Acetate		<50
Trans-1,3-Dichloropropene	34697	<5	Choromethane	34421	<10
Trichloroethylene	34487	<5	Bromomethane	34416	<10
Benzene	34237	<5			
Chlorodibromomethane	34309	<5			
1,1,2-Trichloroethane	34514	<5			
Cis-1,3-Dichloropropene	34702	<5			
Bromoform	34290	<5			
1,1,2,2-Tetrachloroethane	34519	<5			
Tetrachloroethylene	34478	U <5			
Toluene	34483	8.0 .			
Chlorobenzene	34304	<5			
Ethylbenzene	34374	<5			

U - PRESENT LESS THAN CALCULATION LIMIT
J - ESTIMATED VALUE (TIC 1:1 RESPONSE)
M - NOT ANALYZED
N - TENTATIVELY IDENTIFIED COMPOUND - IDENTIFICATION IS BASED ON A MASS SPECTRAL LIBRARY SEARCH

DATE: April 05, 1993
PROJECT: **Southern States Landfill**
SOURCE: **Fulton Co.**
Soil/Sludge
Leachate location

GEORGIA ENVIRONMENTAL PROTECTION
SEMIVOLATILE ORGANIC ANALYSIS
DATA REPORTING SHEET
SAMPLE MATRIX: **Soil**
SAMPLE NO: **HW-4679**
Sediment
Concentration Units **ug/kg**

DATE SAMPLED : 3/9/93
DATE RECEIVED: 3/19/93
DATE EXTRACTED: 3/30/93
DATE ANALYZED: 3/31/93
CHEMIST: RS COMPLETED: SB/DT

COMPOUND	Storet#	FOUND	Compound	Storet#	FOUND
1,2-Dichlorobenzene	34539	≤660	Fluoranthene	34379	≤660
1,3-Dichlorobenzene	34569	≤660	Pyrene	34472	≤660
1,4-Dichlorobenzene	34574	≤660	N-Butyl Benzyl Phthalate	34295	≤660
Bis(2-Chloroethyl)Ether	34276	≤660	Bis(2-Ethylhexyl)Phthalate	39102	≤660
Hexachloroethane	34399	≤660	Chrysene	34323	≤660
N-Nitrosodi-N-Propylamine	34428	≤660	Benzo(a)Anthracene	34529	≤660
Nitrobenzene	34450	≤660	Di-N-Octyl Phthalate	34599	≤660
Hexachlorobutadiene	38705	≤660	Benzo-(B)Fluoranthene	34233	≤660
1,2,4-Trichlorobenzene	34554	≤660	Benzo-(K)Fluoranthene	34245	≤660
Naphthalene	34445	≤660	Benzo-A-Pyrene	34250	≤660
Bis(2-Chloroethoxy)Methane	34281	≤660	Indeno(1,2,3-CD)Pyrene	34406	≤660
Isophorone	34411	≤660	1,2,5,6-Dibenzanthracene	34559	≤660
Hexachlorocyclopentadiene	34389	≤660	Benzo(GHI)Perylene	34524	≤660
2-Chloronaphthalene	34584	≤660	2-Chlorophenol	34589	≤660
Acenaphthylene	34203	≤660	2-Nitrophenol	34594	≤660
Acenaphthene	34208	≤660	Phenol (GC/MS)	34695	≤660
Dimethyl Phthalate	34344	≤660	2,4-Dimethylphenol	34609	≤660
2,4-Dinitrotoluene	34614	≤660	2,4-Dichlorophenol	34604	≤660
2,6-Dinitrotoluene	34629	≤660	2,4,6-Trichlorophenol	34624	≤660
4-Chlorophenyl Phenyl Ether	34644	≤660	4-Chloro-3-methylphenol	34455	≤1300
Fluorene	34384	≤660	2,4-Dinitrophenol	34619	≤3300
Diethyl Phthalate	34339	≤660	4,6-Dinitro-2-methylphenol	34660	≤3300
N-Nitrosodimethylamine	34441	≤660	Pentachlorophenol	39061	≤3300
N-Nitrosodiphenylamine	34436	≤660	4-Nitrophenol	34649	≤3300
Hexachlorobenzene	39701	≤660	Benzidine	39121	≤3300
4-Bromophenyl Phenyl Ether	34639	≤660	3,3'-Dichlorobenzidine	34634	≤1300
Phenanthrene	34464	≤660	2-Methylphenol		≤660
Anthracene	34223	≤660	4-Methylphenol		≤660
Di-N-Butyl Phthalate	39112	≤660	**Sulfur**		**800 NJ**
2-Methyl Naphthalene	78868	≤660			
Dibenzofuran	75647	≤660			
Bis(2-Chloroisopropyl)Ether	34286	≤660			
2,4,5-Trichlorophenol	78401	≤660			

U - Present less than calculation limit.
J - Estimated Value (TIC 1:1 response)
N - Tentatively identified compound (TIC)- Identification is based on a mass spectral library search.

DATE: April 08, 1993
PROJECT: **Southern States Landfill**
SOURCE: **Fulton Co.**
Soil/Sludge
Leachate location

GEORGIA ENVIRONMENTAL PROTECTION
VOLATILE ORGANIC ANALYSIS
DATA REPORTING SHEET
SEDIMENT
SAMPLE MATRIX: **Soil**
SAMPLE NO: **HW-4679**

DATE SAMPLED : 3/19/93
DATE RECEIVED: 3/19/93
DATE ANALYZED: 3/30/93

CHEMIST: MKB COMPLETED: SB/sm

Concentration Units **ug/kg**

COMPOUND	Storet#	FOUND	Compound	Storet#	FOUND
Methylene Chloride	34426	<5	Acetone	75059	<100
Trichlorofluoromethane	34491	<5	Methyl Ethyl Ketone	75078	<100
1,1-Dichloroethylene	34504	<5	Carbon Disulfide	78544	<5
1,1-Dichloroethane	34499	<5	Vinyl Chloride	34495	<10
1,2-Trans-Dichloroethylene	34549	<5	2-Hexanone	75166	<50
Chloroform	34318	<5	Methyl Isobutyl Ketone	75169	<50
1,2-Dichloroethane	34534	<5	Styrene	75192	<5
1,1,1-Trichloroethane	34509	<5	Xylene (Total)	45510	<5
Carbon Tetrachloride	34299	<5	Chloroethane	34314	<10
Dichlorobromomethane	34330	<5	1,2-Dibromoethane	79749	<5
1,2-Dichloropropane	34544	<5	Vinyl Acetate		<50
Trans-1,3-Dichloropropene	34697	<5	Chloromethane	34421	<10
Trichloroethylene	34487	<5	Bromomethane	34416	<10
Benzene	34237	<5			
Chlorodibromomethane	34309	<5			
1,1,2-Trichloroethane	34514	<5			
Cis-1,3-Dichloropropene	34702	<5			
Bromoform	34290	<5			
1,1,2,2-Tetrachloroethane	34519	<5			
Tetrachloroethylene	34478	<5			
Toluene	34483	<5			
Chlorobenzene	34304	<5			
Ethylbenzene	34374	<5			

U - PRESENT LESS THAN CALCULATION LIMIT
J - ESTIMATED VALUE (TIC 1:1 RESPONSE)
M - NOT ANALYZED
N - TENTATIVELY IDENTIFIED COMPOUND - IDENTIFICATION IS BASED ON A MASS SPECTRAL LIBRARY SEARCH

DATE: April 05, 1993
PROJECT: **Southern States Landfill**
SOURCE: **Fulton Co.**
Soil/Sludge
Leachate location

GEORGIA ENVIRONMENTAL PROTECTION
SEMIVOLATILE ORGANIC ANALYSIS
DATA REPORTING SHEET
SAMPLE MATRIX: **Soil**
SAMPLE NO: **HW-4678**
Sediment
Concentration Units **ug/kg**

DATE SAMPLED : 3/9/93
DATE RECEIVED: 3/19/93
DATE EXTRACTED: 3/30/93
DATE ANALYZED: 3/31/93
CHEMIST: RS COMPLETED: SB/DM

COMPOUND	Storet#	FOUND	Compound	Storet#	FOUND
1,2-Dichlorobenzene	34539	<660	Fluoranthene	34379	<660
1,3-Dichlorobenzene	34569	<660	Pyrene	34472	<660
1,4-Dichlorobenzene	34574	<660	N-Butyl Benzyl Phthalate	34295	<660
Bis(2-Chloroethyl)Ether	34276	<660	Bis(2-Ethylhexyl)Phthalate	39102	<660
Hexachloroethane	34399	<660	Chrysene	34323	<660
N-Nitrosodi-N-Propylamine	34428	<660	Benzo(a)Anthracene	34529	<660
Nitrobenzene	34450	<660	Di-N-Octyl Phthalate	34599	<660
Hexachlorobutadiene	38705	<660	Benzo-(B)Fluoranthene	34233	<660
1,2,4-Trichlorobenzene	34554	<660	Benzo-(K)Fluoranthene	34245	<660
Naphthalene	34445	<660	Benzo-A-Pyrene	34250	<660
Bis(2-Chloroethoxy)Methane	34281	<660	Indeno(1,2,3-CD)Pyrene	34406	<660
Isophorone	34411	<660	1,2,5,6-Dibenzanthracene	34559	<660
Hexachlorocyclopentadiene	34389	<660	Benzo(GHI)Perylene	34524	<660
2-Chloronaphthalene	34584	<660	2-Chlorophenol	34589	<660
Acenaphthylene	34203	<660	2-Nitrophenol	34594	<660
Acenaphthene	34208	<660	Phenol (GC/MS)	34695	<660
Dimethyl Phthalate	34344	<660	2,4-Dimethylphenol	34609	<660
2,4-Dinitrotoluene	34614	<660	2,4-Dichlorophenol	34604	<660
2,6-Dinitrotoluene	34629	<660	2,4,6-Trichlorophenol	34624	<660
4-Chlorophenyl Phenyl Ether	34644	<660	4-Chloro-3-methylphenol	34455	<1300
Fluorene	34384	<660	2,4-Dinitrophenol	34619	<3300
Diethyl Phthalate	34339	<660	4,6-Dinitro-2-methylphenol	34660	<3300
N-Nitrosodimethylamine	34441	<660	Pentachlorophenol	39061	<3300
N-Nitrosodiphenylamine	34436	<660	4-Nitrophenol	34649	<3300
Hexachlorobenzene	39701	<660	Benzidine	39121	<3300
4-Bromophenyl Phenyl Ether	34639	<660	3,3'-Dichlorobenzidine	34634	<1300
Phenanthrene	34464	<660	2-Methylphenol		<660
Anthracene	34223	<660	4-Methylphenol		<660
Di-N-Butyl Phthalate	39112	<660	**Fatty Acids**		**1300 NJ**
2-Methyl Naphthalene	78868	<660	**Sulfur**		**19000 NJ**
Dibenzofuran	75647	<660			
Bis(2-Chloroisopropyl)Ether	34286	<660			
2,4,5-Trichlorophenol	78401	<660			

U - Present less than calculation limit.
J - Estimated Value (TIC 1:1 response)
N - Tentatively identified compound (TIC)- Identification is based on a mass spectral library search.

DATE: April 08, 1993
PROJECT: **Southern States Landfill**
SOURCE: **Fulton Co.**
Soil/Sludge
Leachate location

GEORGIA ENVIRONMENTAL PROTECTION
VOLATILE ORGANIC ANALYSIS
DATA REPORTING SHEET
SEDIMENT
SAMPLE MATRIX: **Soil**
SAMPLE NO: **HW-4678**

DATE SAMPLED : 3/19/93
DATE RECEIVED: 3/19/93
DATE ANALYZED: 3/30/93

CHEMIST: MKB COMPLETED: SB/sm

Concentration Units **ug/kg**

COMPOUND	Storet#	FOUND	Compound	Storet#	FOUND
Methylene Chloride	34426	77 .	Acetone	75059	530 .
Trichlorofluoromethane	34491	<5	Methyl Ethyl Ketone	75078	990 .
1,1-Dichloroethylene	34504	<5	Carbon Disulfide	78544	<5
1,1-Dichloroethane	34499	<5	Vinyl Chloride	34495	<10
1,2-Trans-Dichloroethylene	34549	<5	2-Hexanone	75166	<50
Chloroform	34318	<5	Methyl Isobutyl Ketone	75169	310 .
1,2-Dichloroethane	34534	<5	Styrene	75192	<5
1,1,1-Trichloroethane	34509	<5	Xylene (Total)	45510	10 .
Carbon Tetrachloride	34299	<5	Chloroethane	34314	<10
Dichlorobromomethane	34330	<5	1,2-Dibromoethane	79749	<5
1,2-Dichloropropane	34544	<5	Vinyl Acetate		<50
Trans-1,3-Dichloropropene	34697	<5	Chloromethane	34421	<10
Trichloroethylene	34487	<5	Bromomethane	34416	<10
Benzene	34237	<5			
Chlorodibromomethane	34309	<5			
1,1,2-Trichloroethane	34514	<5			
Cis-1,3-Dichloropropene	34702	<5			
Bromoform	34290	<5			
1,1,2,2-Tetrachloroethane	34519	<5			
Tetrachloroethylene	34478	<5			
Toluene	34483	<5			
Chlorobenzene	34304	<5			
Ethylbenzene	34374	U <5			

U - PRESENT LESS THAN CALCULATION LIMIT
J - ESTIMATED VALUE (TIC 1:1 RESPONSE)
M - NOT ANALYZED
N - TENTATIVELY IDENTIFIED COMPOUND - IDENTIFICATION IS BASED ON A MASS SPECTRAL LIBRARY SEARCH

DATE: April 05, 1993
PROJECT: **Southern States Landfill**
SOURCE: **Fulton Co.**
Surface Water #2
onto property

GEORGIA ENVIRONMENTAL PROTECTION
SEMIVOLATILE ORGANIC ANALYSIS
DATA REPORTING SHEET
SAMPLE MATRIX: **Water**
SAMPLE NO: **HW-4677**
Water
Concentration Units **ug/ml**

DATE SAMPLED : 3/9/93
DATE RECEIVED: 3/19/93
DATE EXTRACTED: 3/26/93
DATE ANALYZED: 3/31/93
CHEMIST: RS COMPLETED: SB 4/01

COMPOUND	Storet#	FOUND	Compound	Storet#	FOUND
1,2-Dichlorobenzene	34536	≤10	Fluoranthene	34376	≤10
1,3-Dichlorobenzene	34566	≤10	Pyrene	34469	≤10
1,4-Dichlorobenzene	34571	≤10	N-Butyl Benzyl Phthalate	34292	≤10
Bis(2-Chloroethyl)Ether	34273	≤10	Bis(2-Ethylhexyl)Phthalate	39100	≤10
Hexachloroethane	34396	≤10	Chrysene	34320	≤10
N-Nitrosodi-N-Propylamine	34428	≤10	Benzo(a)Anthracene	34526	≤10
Nitrobenzene	34447	≤10	Di-N-Octyl Phthalate	34596	≤10
Hexachlorobutadiene	38702	≤10	Benzo-(B)Fluoranthene	34230	≤10
1,2,4-Trichlorobenzene	34551	≤10	Benzo-(K)Fluoranthene	34242	≤10
Naphthalene	34696	≤10	Benzo-A-Pyrene	34247	≤10
Bis(2-Chloroethoxy)Methane	34278	≤10	Indeno(1,2,3-CD)Pyrene	34403	≤10
Isophorone	34408	≤10	1,2,5,6-Dibenzanthracene	34556	≤10
Hexachlorocyclopentadiene	34386	≤10	Benzo(GHI)Perylene	34521	≤10
2-Chloronaphthalene	34581	≤10	2-Chlorophenol	34586	≤10
Acenaphthylene	34200	≤10	2-Nitrophenol	34591	≤10
Acenaphthene	34205	≤10	Phenol (GC/MS)	34694	≤10
Dimethyl Phthalate	34341	≤10	2,4-Dimethylphenol	34606	≤10
2,4-Dinitrotoluene	34611	≤10	2,4-Dichlorophenol	34601	≤10
2,6-Dinitrotoluene	34626	≤10	2,4,6-Trichlorophenol	34621	≤10
4-Chlorophenyl Phenyl Ether	34641	≤10	4-Chloro-3-methylphenol	34452	≤200
Fluorene	34381	≤10	2,4-Dinitrophenol	34616	≤50
Diethyl Phthalate	34336	≤10	4,6-Dinitro-2-methylphenol	34657	≤50
N-Nitrosodimethylamine	34438	≤10	Pentachlorophenol	39032	≤50
N-Nitrosodiphenylamine	34433	≤10	4-Nitrophenol	34646	≤50
Hexachlorobenzene	39700	≤10	Benzidine	39120	≤80
4-Bromophenyl Phenyl Ether	34636	≤10	3,3'-Dichlorobenzidine	34631	≤20
Phenanthrene	34461	≤10	2-Methylphenol		≤10
Anthracene	34220	≤10	4-Methylphenol		≤10
Di-N-Butyl Phthalate	39110	≤10			
2-Methyl Naphthalene	77416	≤10			
Dibenzofuran	81302	≤10			
Bis(2-Chloroisopropyl)Ether	34283	≤10			
2,4,5-Trichlorophenol	77687	≤10			

U - Present less than calculation limit.
J - Estimated Value (TIC 1:1 response)
N - Tentatively identified compound (TIC)- Identification is based on a mass spectral library search.

DATE: April 08, 1993
PROJECT: **Southern States Landfill**
SOURCE: **Fulton Co.**
Surface Water #2
onto property

GEORGIA ENVIRONMENTAL PROTECTION
VOLATILE ORGANIC ANALYSIS
DATA REPORTING SHEET
WATER
SAMPLE MATRIX: **Water**
SAMPLE NO: **HW-4677**

DATE SAMPLED : 3/19/93
DATE RECEIVED: 3/19/93
DATE ANALYZED: 3/29/93

CHEMIST: MKB COMPLETED: SB/DR

Concentration Units **ug/ml**

COMPOUND	Storet#	FOUND	Compound	Storet#	FOUND
Methylene Chloride	34423	<5	Acetone	81552	<100
Trichlorofluoromethane	34488	<5	Methyl Ethyl Ketone	81595	<100
1,1-Dichloroethylene	34501	<5	Carbon Disulfide	77041	<5
1,1-Dichloroethane	34496	U <5	Vinyl Chloride	39175	<10
1,2-Trans-Dichloroethylene	34546	<5	2-Hexanone	77103	<50
Chloroform	32106	<5	Methyl Isobutyl Ketone	81596	<50
1,2-Dichloroethane	32103	<5	Styrene	77128	<5
1,1,1-Trichloroethane	34506	<5	Xylene (Total)	81551	17 .
Carbon Tetrachloride	32102	<5	Chloroethane	34311	<10
Dichlorobromomethane	32101	<5	1,2-Dibromoethane	77651	<5
1,2-Dichloropropane	34541	<5	Vinyl Acetate	77057	<50
Trans-1,3-Dichloropropene	34699	<5	Chloromethane	34418	<10
Trichloroethylene	39180	<5	Bromomethane	34413	<10
Benzene	34030	U <5			
Chlorodibromomethane	34306	<5			
1,1,2-Trichloroethane	34511	<5			
Cis-1,3-Dichloropropene	34704	<5			
Bromoform	32104	<5			
1,1,2,2-Tetrachloroethane	34516	<5			
Tetrachloroethylene	34475	<5			
Toluene	34010	5.1 .			
Chlorobenzene	34301	<5			
Ethylbenzene	34371	12 .			

U - PRESENT LESS THAN CALCULATION LIMIT
J - ESTIMATED VALUE (TIC 1:1 RESPONSE)
M - NOT ANALYZED
N - TENTATIVELY IDENTIFIED COMPOUND - IDENTIFICATION IS BASED ON A MASS SPECTRAL LIBRARY SEARCH

DATE: April 05, 1993
PROJECT: Southern States Landfill
SOURCE: Fulton Co.
Surface Water #1
onto property

GEORGIA ENVIRONMENTAL PROTECTION
SEMIVOLATILE ORGANIC ANALYSIS
DATA REPORTING SHEET
SAMPLE MATRIX: Water
SAMPLE NO: HW-4676
Water
Concentration Units ug/ml

DATE SAMPLED : 3/[illegible]/93
DATE RECEIVED: 3/[illegible]/93
DATE EXTRACTED: 3/26/93
DATE ANALYZED: 3/31/93
CHEMIST: RS COMPLETED: SB/[illegible]

COMPOUND	Storet#	FOUND
1,2-Dichlorobenzene	34536	<10
1,3-Dichlorobenzene	34566	<10
1,4-Dichlorobenzene	34571	<10
Bis(2-Chloroethyl)Ether	34273	<10
Hexachloroethane	34396	<10
N-Nitrosodi-N-Propylamine	34428	<10
Nitrobenzene	34447	<10
Hexachlorobutadiene	38702	<10
1,2,4-Trichlorobenzene	34551	<10
Naphthalene	34696	<10
Bis(2-Chloroethoxy)Methane	34278	<10
Isophorone	34408	<10
Hexachlorocyclopentadiene	34386	<10
2-Chloronaphthalene	34581	<10
Acenaphthylene	34200	<10
Acenaphthene	34205	<10
Dimethyl Phthalate	34341	<10
2,4-Dinitrotoluene	34611	<10
2,6-Dinitrotoluene	34626	<10
4-Chlorophenyl Phenyl Ether	34641	<10
Fluorene	34381	<10
Diethyl Phthalate	34336	<10
N-Nitrosodimethylamine	34438	<10
N-Nitrosodiphenylamine	34433	<10
Hexachlorobenzene	39700	<10
4-Bromophenyl Phenyl Ether	34636	<10
Phenanthrene	34461	<10
Anthracene	34220	<10
Di-N-Butyl Phthalate	39110	<10
2-Methyl Naphthalene	77416	<10
Dibenzofuran	81302	<10
Bis(2-Chloroisopropyl)Ether	34283	<10
2,4,5-Trichlorophenol	77687	<10

Compound	Storet#	FOUND
Fluoranthene	34376	<10
Pyrene	34469	<10
N-Butyl Benzyl Phthalate	34292	<10
Bis(2-Ethylhexyl)Phthalate	39100	<10
Chrysene	34320	<10
Benzo(a)Anthracene	34526	<10
Di-N-Octyl Phthalate	34596	<10
Benzo-(B)Fluoranthene	34230	<10
Benzo-(K)Fluoranthene	34242	<10
Benzo-A-Pyrene	34247	<10
Indeno(1,2,3-CD)Pyrene	34403	<10
1,2,5,6-Dibenzanthracene	34556	<10
Benzo(GHI)Perylene	34521	<10
2-Chlorophenol	34586	<10
2-Nitrophenol	34591	<10
Phenol (GC/MS)	34694	<10
2,4-Dimethylphenol	34606	<10
2,4-Dichlorophenol	34601	<10
2,4,6-Trichlorophenol	34621	<10
4-Chloro-3-methylphenol	34452	<200
2,4-Dinitrophenol	34616	<50
4,6-Dinitro-2-methylphenol	34657	<50
Pentachlorophenol	39032	<50
4-Nitrophenol	34646	<50
Benzidine	39120	<80
3,3'-Dichlorobenzidine	34631	<20
2-Methylphenol		<10
4-Methylphenol		<10

U - Present less than calculation limit.
J - Estimated Value (TIC 1:1 response)
N - Tentatively identified compound (TIC)- Identification is based on a mass spectral library search.

DATE: April 08, 1993
PROJECT: **Southern States Landfill**
SOURCE: **Fulton Co.**
Surface Water #1
onto property

GEORGIA ENVIRONMENTAL PROTECTION
VOLATILE ORGANIC ANALYSIS
DATA REPORTING SHEET
WATER
SAMPLE MATRIX: **Water**
SAMPLE NO: **HW-4676**

DATE SAMPLED : 3/19/93
DATE RECEIVED: 3/19/93
DATE ANALYZED: 3/29/93

CHEMIST: MKB COMPLETED: SB/or

Concentration Units **ug/ml**

COMPOUND	Storet#	FOUND	Compound	Storet#	FOUND
Methylene Chloride	34423	≤5	Acetone	81552	≤100
Trichlorofluoromethane	34488	≤5	Methyl Ethyl Ketone	81595	≤100
1,1-Dichloroethylene	34501	≤5	Carbon Disulfide	77041	≤5
1,1-Dichloroethane	34496	≤5	Vinyl Chloride	39175	≤10
1,2-Trans-Dichloroethylene	34546	≤5	2-Hexanone	77103	≤50
Chloroform	32106	≤5	Methyl Isobutyl Ketone	81596	≤50
1,2-Dichloroethane	32103	≤5	Styrene	77128	≤5
1,1,1-Trichloroethane	34506	≤5	Xylene (Total)	81551	≤5
Carbon Tetrachloride	32102	≤5	Chloroethane	34311	≤10
Dichlorobromomethane	32101	≤5	1,2-Dibromoethane	77651	≤5
1,2-Dichloropropane	34541	≤5	Vinyl Acetate	77057	≤50
Trans-1,3-Dichloropropene	34699	≤5	Choromethane	34418	≤10
Trichloroethylene	39180	≤5	Bromomethane	34413	≤10
Benzene	34030	≤5			
Chlorodibromomethane	34306	≤5			
1,1,2-Trichloroethane	34511	≤5			
Cis-1,3-Dichloropropene	34704	≤5			
Bromoform	32104	≤5			
1,1,2,2-Tetrachloroethane	34516	≤5			
Tetrachloroethylene	34475	≤5			
Toluene	34010	≤5			
Chlorobenzene	34301	≤5			
Ethylbenzene	34371	≤5			

U - PRESENT LESS THAN CALCULATION LIMIT
J - ESTIMATED VALUE (TIC 1:1 RESPONSE)
M - NOT ANALYZED
N - TENTATIVELY IDENTIFIED COMPOUND - IDENTIFICATION IS BASED ON A MASS SPECTRAL LIBRARY SEARCH

GEORGIA ENVIRONMENTAL PROTECTION DIVISION
LAND PROTECTION BRANCH

CHAIN OF CUSTODY

FACILITY: South States Landfill LOCATION: Southern States Landfill (Fulton Co.)

SAMPLE #	LOG #	LAB I.D.	DESCRIPTION	COLLECTED BY (Name)	DATE	TIME
1	4676		surface water 1	Williams/Khaleghi	3/19/93	
2	4677		Surface Water 2	Williams/Khaleghi	3/19/93	
3	4678		Soil/Sludge leachate location	Williams/Khaleghi	3/19/93	
4	4679		Soil/sludge leachate location	Williams/Khaleghi	3/19/93	
5	4680		Soil/Sludge leachate location	Williams/Khaleghi	3/19/93	
6	4681		Soil/sludge leachate location	Williams/Khaleghi	3/19/93	

TRANSFER RECORD

TRANSFERRED BY (Name)	TO (Name) (IF FINAL: Lab Name)	DATE	TIME	METHOD OF TRANSFER	RECEIVED BY (Name)	DATE
D. Williams	L. Medina	3/19/93	3:10	Hand	[signature]	3/19/93

ANALYSES REQUESTED:

Southern Stales Landfill
P.O. Box 94143
Atlanta GA 30337 Phone NO. 435-996-

off Bolton Rd and Collins Rd *
301318

Owner: Landfill
6201 Power Ferry
Atlanta GA 30339 Phone NO. 953-0608

#5593
5

Town Center K
210 Batten lak. Blev.

Car tech
2215 Cobb Bankway


CHATTAHOOCHEE RIVER
NATIONAL RECREATIONAL AREA
(LANDING PEACHTREE UNIT)
Riverside
Bolton
Chattahoochee
Riverside Ch
Peyton Park
Scott Sch
Hollywood Cemetery
Bloomfield
Carey Park
Carey Farms
Simsville Ch
Center Hill Ch
Inman Yard
Creek
INTERCHANGE 10
INTERCHANGE 9
INTERCHANGE 8
RECEIVED
GGS
APR 29 1992

FIGURE 1

U.S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10715677 Site ID: GAD984288191

Site Name: Southern Steel Bradfield

Nature of Material:

Map:	☒	Computer Disks:	☐
Photos:	☐	CD-ROM:	☐
Blueprints:	☐	Oversized Report:	☐
Slides:	☐	Log Book:	☐

Other (describe): Radius Map

Amount of material:

* Please contact the appropriate Records Center to view the material *